

**REMARKS**

Claims 1 to 22 are pending in the application. Claims 1, 2, 4, 8, 12 to 14, 16, 21, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. (U.S. Patent 5,279,655). Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of Nishizaki et al. (U.S. Patent 6,022,910). Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of Tobias (U.S. Patent 5,286,288). Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of Ball (U.S. Patent 4,684,956). Claims 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of Yaegashi et al. (U.S. Patent 5,270,730), Wickramanayake (U.S. Patent 5,531,816), Malhotra et al. '117 (U.S. Patent 5,922,117), and Breton et al. (U.S. Patent 6,106,599). Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of Shawcross et al. (U.S. Patent 6,028,180) and Bruder et al. (U.S. Patent 5,015,292). Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Takazawa et al. in view of JP 6 228 476, Yaegashi et al., and Malhotra et al. '390 (U.S. Patent 5,902,390). Claims 1 to 5, 7 to 9, 13, and 18 to 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton et al. '607 (U.S. Patent 6,045,607) in view of Takazawa et al., Ball, and Fujioka (U.S. Patent 5,397,388). Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Breton et al. '607 in view of Takazawa et al., Ball, and Fujioka and further in view of Tobias et al. Claims 10 to 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton et al. '607 in view of Takazawa et al., Ball, and Fujioka and further in view of Yaegashi et al., Wickramanayake,

Malhotra et al. '117, and Breton et al. '599 (U.S. Patent 6,106,599). Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Breton et al. '607 in view of Takazawa et al., Ball, and Fujioka and further in view of JP 06228476, Yaegashi et al., and Malhotra et al. '390.

Applicant continues to traverse the rejections of the claims under §103 for the reasons set forth in the previous Amendments.

In response to Applicant's position as set forth in the previous Amendment to the effect that Takazawa et al. discloses the use of a viscosity modifier in a liquid ink but not in a solid ink, the Examiner has stated that given that there is nothing in Takazawa et al. which negates using aromatic viscosity modifiers in a solid ink composition, the Examiner's position remains that Takazawa et al. discloses the use of aromatic viscosity modifiers in solid ink compositions as presently claimed.

Applicant disagrees with this position. Applicant reminds the Examiner that the burden of establishing a case of obviousness rests with the Examiner, and that the Examiner may not make an assertion, unsupported by facts, of unpatentability and require Applicant to provide evidence to rebut the assertion. In ex parte prosecution, the PTO has the burden of producing a factual basis for a rejection. In re Piasecki, 745 F.2d 1468, 223 U.S.P.Q. 785 (Fed. Cir. 1984); In re Gordon, 733 F.2d 900 (Fed. Cir. 1984). As the Court of Appeals for the Federal Circuit stated in In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984): "The Supreme Court in Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under section 103. As adapted to ex parte procedure, Graham is interpreted as continuing to place the 'burden of

proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under sections 102 and 103'. In re Warner, 379 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967)." Takazawa et al. clearly fails to teach or suggest the use of a viscosity modifier in a solid ink. Accordingly, Applicant is of the position that the Examiner has failed to establish a *prima facie* case of obviousness in the application of this reference to the instant claims.

In response to Applicant's position as set forth in the previous Amendment to the effect that Takazawa et al. does not disclose the time necessary for the ink to change from solid state to liquid state and that compositions with the same melting temperature do not necessarily possess the same melting time, the Examiner has stated that while Applicant argues that compositions with the same melting temperature do not necessarily possess the same melting time, it is noted that not only does the ink composition of Takazawa et al. possess the same melting temperature as presently claimed, the ink composition of Takazawa et al. comprises the same ingredients as presently claimed, i.e. styrene resin, aromatic viscosity modifier, ink vehicle, and colorant, and that in light of this, and absent evidence to the contrary, it is the Examiner's position that the ink composition of Takazawa et al. would possess the same melting time as presently claimed.

Applicant disagrees with this position. Functional language in a claim must not be ignored. See, e.g., In re Caldwell, 319 F.2d 254, 138 U.S.P.Q. 243 (C.C.P.A. 1963). As the court held in In re Swinehart, 439 F.2d 210, 169 U.S.P.Q. 226 (C.C.P.A. 1971), there is nothing wrong with attempting to define something (in the Swinehart case, a composition) by what it does rather than by what it is (as evidenced by

specific structure or material, for example). Claims such as instant claim 4, which recites an ink that undergoes, upon heating, a change from a solid state to a liquid state in a period of no more than about 100 milliseconds, encompass only those compositions that exhibit this functional characteristic. Nothing in Takazawa et al. teaches or suggests selecting the ink ingredients so that this functional limitation is met. Accordingly, Applicant is of the position that claim 4 is particularly in condition for allowance with respect to the teachings of this reference.

In response to Applicant's position as set forth in the previous Amendment to the effect that Breton et al. discloses an entirely different composition from that presently claimed, the Examiner has stated that it is agreed that Breton et al. does not disclose styrene or terpene resin or aromatic viscosity modifier as presently claimed, which is why it is used in combination with Takazawa et al., Ball, and Fujioka, all of which are drawn to hot melt inks, that the ink of Breton et al. is open to the inclusion of other ingredients and nothing in Breton et al. negates against using ingredients such as styrene resin or aromatic viscosity modifier, that there is motivation to combine Takazawa et al., Ball, and Fujioka with Breton et al. including that they are all drawn to the same field of endeavor, and that in light of the above, and absent evidence to the contrary, it would have been obvious to one of ordinary skill in the art to use the styrene/terpene resin and aromatic viscosity modifier disclosed by Takazawa et al., Ball, and Fujioka in the ink of Breton et al. and thereby arrive at the claimed invention.

Applicant disagrees with this position. Applicant again reminds the Examiner that the burden of establishing a case of obviousness rests with the Examiner, and that the Examiner may not

make an assertion, unsupported by facts, of unpatentability and require Applicant to provide evidence to rebut the assertion. The PTO has the burden under section 103 to establish a prima facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fine, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988); In re Newell, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989); Ex Parte Levensgood, 28 USPQ 2d 1300 (Bd. Pat. App. & Int. 1993). Nothing in any of the cited references would lead one of ordinary skill in the art to view them in combination. Further, even if these references were viewed in combination, the combined teachings thereof would not lead one of ordinary skill in the art to arrive at the instant invention.

In response to Applicant's position as set forth in the previous Amendment to the effect that Wickramanayake, Shawcross et al., Bruder et al., and JP 6228476 are drawn to liquid inks and thus there is no motivation to combine these references with the solid ink reference of either Takazawa et al. or Breton et al., the Examiner has stated that Applicant has provided no clear and convincing evidence that components present in liquid ink jet inks cannot be added to solid ink jet inks, and that Wickramanayake, Shawcross et al., Bruder et al., and JP 6228476 are used as teaching references, so it is not necessary for these secondary references to contain all the features of the presently claimed invention. The Examiner has stated that these references each teach a certain concept, and in combination with the primary reference, disclose the presently claimed invention.

Applicant disagrees with this position. Applicant again reminds the Examiner that the burden of establishing a case of obviousness rests with the Examiner, and that the Examiner may not make an assertion, unsupported by facts, of unpatentability and require Applicant to provide evidence to rebut the assertion. The Examiner cannot require Applicant to "provide . . . clear and convincing evidence that components present in liquid ink jet inks cannot be added to solid ink jet inks". The references cited by the Examiner fail to teach or suggest to one of ordinary skill in the art the ink compositions recited in the instant claims. The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fine, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988); In re Newell, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989); Ex Parte Levengood, 28 USPQ 2d 1300 (Bd. Pat. App. & Int. 1993). The Examiner has failed to make such a showing. Applicant, accordingly, is of the position that the present invention is patentable with respect to the teachings of these references.

In response to Applicant's position as set forth in the previous Amendment to the effect that one of ordinary skill in the art would not be motivated to combine the teachings of either Takazawa et al. or Breton et al. with the teachings of Ball, the Examiner has stated that given that Ball is drawn to hot melt ink as are Takazawa et al. and Breton et al., and further given that Ball teaches the use of the same type and amount of resin presently claimed, i.e. styrene resin, and absent

evidence to the contrary, it is the Examiner's position that there is ample motivation to combine either Takazawa et al. or Breton et al. with Ball.

Applicant disagrees with this position. Applicant again reminds the Examiner that the burden of establishing a case of obviousness rests with the Examiner, and that the Examiner may not make an assertion, unsupported by facts, of unpatentability and require Applicant to provide evidence to rebut the assertion. The Examiner cannot require Applicant to provide "evidence to the contrary" when no *prima facie* case of obviousness has been established. The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fine, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Since the Examiner has failed to make such a showing, Applicant remains of the position that the instant claims are patentable with respect to the teachings of these references.

In response to Applicant's position as set forth in the previous Amendment to the effect that one of ordinary skill in the art would have no motivation to combine the viscosity modifiers of Malhotra et al. '117 or Yaegashi et al. with either Takazawa et al. or Breton et al., the Examiner has stated that Yaegashi et al., which is drawn to hot melt inks, discloses the use of heat fusible substances such as dibenzofuran and 4-methylbiphenyl to produce an ink with excellent dischargeability, storability, and little blotting while Malhotra et al. '117, which is drawn to hot melt inks, discloses the use of 1-adamantane ethanol to ensure that the ink has low acoustic loss to minimize or reduce energy consumption

of the printer and to generate high quality, lightfast, and waterfast images. The Examiner is of the position that given that both Yaegashi et al. and Malhotra et al. '117 are drawn to the same field of endeavor as either Takazawa et al. or Breton et al. and both Yaegashi et al. and Malhotra et al. '117 provide motivation for using the above described ingredients in these hot melt inks, and absent evidence to the contrary, it would have been obvious to one of ordinary skill in the art to use such viscosity modifiers in the ink of either Takazawa et al. or Breton et al. and thereby arrive at the claimed invention.

Applicant disagrees with this position. Applicant again reminds the Examiner that the burden of establishing a case of obviousness rests with the Examiner, and that the Examiner may not make an assertion, unsupported by facts, of unpatentability and require Applicant to provide evidence to rebut the assertion. The Examiner cannot require Applicant to provide "evidence to the contrary" when no *prima facie* case of obviousness has been established. The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fine, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Since the Examiner has failed to make such a showing, Applicant remains of the position that the instant claims are patentable with respect to the teachings of these references.



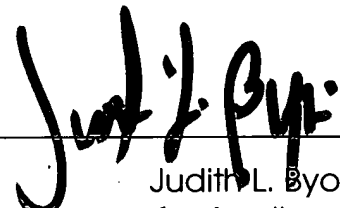
Application No. 09/401,740

Applicant believes that the foregoing distinctions place the claims in condition for allowance, and accordingly respectfully requests reconsideration and withdrawal of all grounds for rejection.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby authorized to call Applicant(s) attorney, Judith L. Byorick, at Telephone Number (716) 423-4564, Rochester, New York.

No additional fee is believed to be required for this amendment; the undersigned Xerox Corporation attorney (or agent), however, hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Judith L. Byorick", is written over a horizontal line.

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April 17, 2001

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